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47514 7590 02/13/2008 FLETCHER YODER (CHEVRON PHILLIPS) P. O. BOX 692289 HOUSTON, TX 77069			EXAMINER CHEUNG, WILLIAM K	
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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/699,151
Filing Date: October 31, 2003
Appellant(s): HOTTOVY, JOHN D.

Floron C. Faries
(Registration No. 59,991)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed November 29, 2007 appealing from the Office action mailed June 18, 2007.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The amendment after final rejection filed on August 23, 2007 has not been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-6 are rejected under 35 U.S.C. 103(a) as obvious over Stanley et al. (US 3,244,681).

The invention of claims 1-6 relates to a **polymerization process** comprising: **polymerizing in a loop reactor** having an **inner surface**, at least one **olefin monomer in a liquid medium** to produce a **fluid slurry** comprising solid olefin polymer particles in a liquid medium, wherein said inner surface of said loop reactor has a root mean square surface roughness less than about 120 micro inches.

Stanley et al. in its entirety, particularly (Figure; col. 1, line 49 to col. 3, line 16; col. 5-6, claims 1-2) describe a polymerization process comprising a loop reactor, olefin monomers in a liquid medium to produce a fluid slurry.

The difference between the invention of claims 1-6 and Stanley et al. is that Stanley et al. are silent on a loop reactor has a root mean square surface roughness less than about 120 micro inches.

However, because Stanley et al. (col. 1, line 61-64; col. 6, claim 3) clearly suggest one of ordinary skill to employ a loop reactor having a reactor zone (inner surfaces) with smooth surface, or as smooth as possible, it would have been obvious to one of ordinary skill in art to polish all the inner surface area of loop reactor of Stanley et al. to obtain a loop reactor has a root mean square surface roughness less than about 120 micro inches. Although Stanley et al. may not use the same units for measuring smoothness or roughness, appellants must recognize that the recited "root mean square surface roughness" is merely a functional language for gauging roughness or smoothness that does not lend itself to patentability. Motivated by the expectation of success of further reducing reactor fouling, it would have been obvious to one of ordinary skill in art to polish all the inner surface area of loop reactor of Rohlffing et al. to obtain a loop reactor having a surface as smooth as possible, which include the roughness values as claimed.

(10) Response to Argument

Appellant's arguments filed November 29, 2007 have been fully considered but they are not persuasive. Appellants argue that there is inadequate motivation for one of ordinary skill in art to obtain the specific smoothness as claimed. However, appellants must recognize that Rohlfing et al. (col. 1, line 61-64; col. 6, claim 3) clearly suggest one of ordinary skill to employ a loop reactor having a reactor zone (inner surfaces) with a smooth surface, or a surface as smooth as possible to reduce fouling.

Motivated by the expectation of success of further reducing reactor fouling, it would have been obvious to one of ordinary skill in art to polish all the inner surface area of loop reactor of Rohlfing et al. to obtain a loop reactor having a surface as smooth as possible, which include the roughness values as claimed.

Although Rohlfing et al. do not use the same units or description for measuring smoothness or roughness of the loop reactor disclosed, appellants must recognize that the recited "root mean square surface roughness" is merely a functional language for gauging roughness or smoothness that does not lend itself to patentability. Appellants must also recognize that the loop reactor of Rohlfing et al. possesses a smooth surface

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that is inherently measurable in various units, rms, micro inch, or micron, even though the unit for the smoothness measurement is not disclosed. Appellants must recognize that the lack of disclosure on the units of measurement does not mean that the surface of the loop reactor of Rohlfing et al. is not measurable with the units of “micro inches”.

In view of the reasons set forth above, the examiner has a reasonable basis that the rationale of the instant rejection is adequate and proper.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

/William K Cheung/

Primary Examiner, Art Unit 1796

Respectfully submitted,

William K. Cheung, Ph. D.

Conferees:

/David Wu/

Supervisory Patent Examiner, Art Unit 1796

/Gregory L Mills/

Supervisory Patent Examiner, Art Unit 1700

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